

Amendments to the Claims:

A listing of the entire set of pending claims (including amendments to the claims, if any) is submitted herewith per 37 CFR 1.121. This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Previously Presented) A transfective liquid crystal display comprising
a plurality of pixels,
a liquid crystal layer (3) and
an optical layer (7) comprising a birefringent material,
said pixels being divided into at least one transmissive subpixel (5) and at least one reflective subpixel (4), and
said optical layer (7) being patterned into domains (8, 9), each covering at least part of a reflective subpixel (4) or at least part of a transmissive subpixel (5), the birefringent material in a first domain (8) covering a reflective subpixel (4) of a pixel having a first birefringence and the birefringent material in a second domain (9) covering a transmissive subpixel (5) of said pixel having a second birefringence,
wherein the first and second birefringence are different from each other and adapted independently to improve the viewing angle dependence for the reflective and transmissive subpixels respectively.
2. (Original) A transfective liquid crystal display according to claim 1, wherein the birefringent material of the optical layer (7) in the first domain (8) and in the second domain (9) are made from the same material.
3. (Original) A transfective liquid crystal display according to claim 1, wherein the birefringent material is a material with positive birefringence.

4. (Currently Amended) A transfective liquid crystal display according to claim 1, wherein the birefringent material is a material with negative birefringence.

5. (Original) A transfective liquid crystal display according to claim 1, wherein the tilt of the optical axis of the birefringent material in the optical layer (7) in the first domain (8) is different from the tilt of the optical axis of the birefringent material in the optical layer in the second domain (9).

6. (Original) A transfective liquid crystal display according to claim 1, wherein the direction of the optical axis of the birefringent material in the optical layer (7) in the first domain (8) is different from the direction of the optical axis of the birefringent material in the optical layer in the second domain (9).

7. (Original) A transfective liquid crystal display according to claim 1, wherein the retardation of the birefringent material in the optical layer (7) in the first domain (8) is different from the retardation of the birefringent material in the optical layer in the second domain (9).

8. (Original) A transfective liquid crystal display according to claim 5, wherein the tilt of the optical axis of said birefringent material in the optical layer (7) in either the first or the second domain varies over a thickness of the optical layer.

9. (Original) A transfective liquid crystal display according to claim 1, wherein the birefringent material of the optical layer in the domains covering transmissive and/or reflective subpixels is a cholesterically ordered material.

10. (Original) A transfective liquid crystal display according to claim 9, wherein a cholesteric pitch of the birefringent material in the optical layer in a first domain (8) is different from a cholesteric pitch of the birefringent material in the optical layer in the second domain (9).

11. (Original) A transfective liquid crystal display according to claim 1, wherein said optical layer (7) comprises at least two sublayers, at least one of said sublayers being patterned into domains.

12. (Original) A transfective liquid crystal display according to claim 1, wherein the optical layer in the second domain (9) comprises a viewing angle compensator.

13. (Original) A transfective liquid crystal display according to claim 1, wherein the optical layer in the first domain (8) comprises a quarter wave retarder.

14. (Original) A transfective liquid crystal display according to claim 13, wherein the retardation of said $\lambda/4$ -retarders is in the range of 100 to 200 nm.

15. (Currently Amended) A transfective liquid crystal display comprising
a plurality of pixels,
a liquid crystal layer (3) and
an optical layer (7) an optical layer (7) comprising a birefringent material,
said pixels being divided into at least one transmissive subpixel (5) and at least one reflective subpixel (4), and
said optical layer (7) being patterned into domains (8, 9), each covering at least part of a reflective subpixel (4) or at least part of a transmissive subpixel (5), the birefringent material in a first domain (8) covering a reflective subpixel (4) of a pixel having a first birefringence and the birefringent material in a second domain (9) covering a transmissive subpixel (5) of said pixel having a second birefringence,
wherein the first and second birefringence are different from each other and adapted independently to improve the viewing angle dependence for the reflective and transmissive subpixels respectively, wherein the optical layer (7) is obtainable by a method according to claim 16.

16. (Currently Amended) Method for the manufacture of a patterned optical layer, said method comprising:

providing a photo-polymerisable mixture having a liquid crystalline phase;
aligning said mixture;

performing a first irradiation of the mixture under a first reaction condition, to polymerize a first domain of photo-polymerisable mixture in a first configuration exhibiting a first birefringence;

performing a second irradiation of the mixture under a second reaction condition to polymerize a second domain of the photo-polymerisable mixture in a second configuration exhibiting a second birefringence

wherein the first and second birefringence are different from each other and adapted independently to improve the viewing angle dependence for the reflective and transmissive subpixels respectively.

17. (Original) A method according to claim 15, wherein said aligning is performed by photo-alignment or by alignment on a rubbed alignment film.

18. (Original) A method according to claim 16, further comprising a converting step, in which a convertible compound comprised in said photo-polymerisable mixture is converted, thereby changing the tilt of the liquid crystal molecules and/or the helical twist and/or the retardation of the mixture.

19. (Original) A method according to claim 16, further comprising an evaporation step, in which a volatile compound comprised in the photo-polymerisable mixture evaporates from the mixture, thereby changing the tilt of the liquid crystal molecules.

20. (Original) A method according to claim 16, further comprising a photo-alignment step, in which photo-alignable liquid crystal molecules are irradiated, thereby changing the tilt orientation of said photo-alignable liquid crystal molecules of the liquid crystalline mixture.

21. (Original) A method according to claim 16, wherein the temperature at the first reaction condition is different from the temperature at the second reaction condition.

22. (Original) A method according to claim 16, wherein the atmosphere at the first reaction condition is different from the atmosphere at the second reaction condition.